



the RARA RAG

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ROCHESTER AMATEUR RADIO ASSOCIATION, INC.

VOL.54

NOVEMBER 2001

NO. 3

Annual RARA Members Auction November 2, 2001

Marykay Vesco, KC2DPG

It's that time of year again for our annual auction; it's so exciting! As tradition has it, our auctioneers and comedy entertainment will be hosted by our very own Great Amateur Radio Experts: Ed Gable, K2MP and Dick Goslee, K2VCZ; accompanied by Brad Allen, KB2CHY, our Expert Sound Effects and Audio Engineer. So let's dig out that surplus equipment that's just sitting in your shack or garage and watch these experts extract the highest bid for your hidden treasures. This auction is also, a great way to find that elusive and inexpensive piece or pieces of equipment you have been waiting for but just couldn't get your hands onto. It is also a nice way for your other half to approve of a purchase or sale of radio equipment.

Doors will open at 7:00 P.M., so that sellers may come early to place your equipment on the tables; and buyers may come early to preview the selections and to plan buying strategies. There will be no regular business meeting this month, so the auction will start promptly at 8:00 P.M. If you are late, you may miss some exciting opportunities.

Ok, down to business. As you all know we have some very important but simple rules to be followed to make this buying and selling auction a great and fair experience for everyone.

RARA assesses a fee of 10% on each sale (this benefits the club and is an important fundraiser for paying the bills). The seller pays the fee from the proceeds of the sale. Both the seller and the buyer must come forward to the Treasures table as soon as the item is declared SOLD by the auctioneers. This is a Members only auction; therefore, you must be a RARA

member to gain entrance to the auction. For-
got to pay your dues, don't worry membership
renewals may be paid the night of the auction!
Each paid member may bring ONE guest to the
auction. Please respect the auction protocol,
NO PARKING LOT SALES or SALES
PRIOR TO THE START OF THE AUCTION.
As stated before, this event will benefit your
club and is a very important fundraiser for pay-
ing our bills. Don't forget donations to RARA
are tax deductible!

So treat yourself to a fun, exciting, and en-
tertaining Friday evening with your fellow
amateur radio friends. Doors open at 7:00 P.
M. and auction starts promptly at 8:00 P.M. at
the Henrietta Fire Hall, 3129 E Henrietta Road.
As always, refreshments will be available!

Annual RARA Auction

November 2, 2001

Henrietta Fire Hall,
3129 E. Henrietta Rd.

Auctioneers

Ed Gable, K2MP

And

Dick Goslee, K2VCZ

the RARA RAG

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RARA RAG 2

The Prez Says

Peter Fournia, W2SKY

The word "cells" has crept into our conversations lately. We hear about terrorist cells, phone cells, storm cells and other cells. I must alert you to the latest cells that have emerged. They are amateur radio cells.

Amateur radio cells are pockets of active amateur radio operators that reek havoc on things. They attack misinformation and poor communications, and they interject information effecting clarity and response time of information, even under adverse conditions. These operatives dedicate large parts of their life to this activity. Their enthusiasm, knowledge and skills tend to destroy basic human characteristics known as indifference, apathy, and boredom.

I have witnessed these cells in action in the last 6 months. Their numbers are numerous and they are succeeding at their mission. The public cannot escape their impact. These cells adapt with the times and are positioning themselves for larger impacts in the future. Some of these amateur radio cells have focused on our children and have infiltrated our schools to spread their words about radio sciences, the amateur radio hobby and the enjoyment of continuous learning.

The cell's past deeds and plans are flaunted on the RARA Internet site. They have impacted the Stuart Horse Trials, ADA's Tour de Cure, the Finger Lakes Bicycle Tour, and the Hilton Applefest to name a few. They have plans that will have an imminent impact to JOTA and halloween events around the nation. I sense that the dedication of these cells have recently increased and expect that they will have larger influences in the future.

Thanks to some of the active cells in our community: BARK, Drumlins ARC, RDXA, RVHFG, RARA and other clubs and individuals who are on the front lines of applying and sharing the diverse activities of our hobby. Public services, amateur radio demonstrations and assistance with educating youth will help keep us current and relevant to today's needs. It's also fun!

RARA HOTLINE
442-0587

RARA And Drumlins ARC Join Hands At "Finger Lakes Foliage 130"

Bill Hopkins, AA2YV

The fall colors on Saturday and Sunday, October 13th and 14th, couldn't have been better for the two-day cycle ride of 130 miles along Lakes Cayuga and Seneca in support of the American Diabetes Association. Keith Freeberg (N2BEL), RARA's Public Relations point man brought together RARA and the Drumlins Amateur Radio Club, with their thirty-foot mil-spec tower and Cushcraft tribander. Bob Wilkin (W2GIV and president of DARC) and his crew set up the radio site, and Boy Scouts from the Seneca Falls area erected the operations tent. Many RARA volunteers were out at checkpoints like Taughannock Falls on highway 89 to give communication support for safety and bike repair. The Auburn VHF repeater on 147.000 (WA2QYT) provided the friendly "uplink."

The two days took the cyclists, first, down the west side of Cayuga and up the east side of Seneca. On the second day they rode from Phelps NY through countryside, then north along the west side of Seneca. Local and regional representatives from the American Diabetes Association were on hand to coordinate logistics for cyclists, support personnel and radio operators. On Saturday the operation began about 8 A.M., and by 3 P.M., or so, all cyclists had completed the 70 miles for the first day.

RARA's service to the public can be critical in unexpected ways. While working from his car at a checkpoint, Manuel Romero (KC2GOE) was witness to an automobile accident and called immediately for ambulance and police assistance. But usually, hams, like Mark Delaney (KC2GMG) and Greg Michels (KC2GXV), relayed the advance of the cyclists past their positions, handing them off to the next station.

Most of the time, net control was on the road. The HF multi-rig stations were located at the New York Chiropractic College in Seneca Falls where cyclists finished their first day and stayed the night. (The RARA communications volunteers also received food and

lodging.) A second ham crew — Drumlins (WA2AAZ) and RARA (K2JD) — operated a joint Special Events Station on 40, 20 and 15, with SSB, PSK31 and Slow Scan TV, both to demo ham radio to the cyclists and the Diabetes Assoc., and also to publicize the effort to hams across the nation. On-the-air comments in the pile-ups (WA2AAZ on 20 meter sideband), showed how hams nationwide understand the need for us to be active in service to the nation. By using their "mic" skills, Nancy Embich (cyclist no. 49) and Wendy Jennings (cyclist no. 55) greeted hams, from Kentucky to Como, Italy, and brought 'em out of the woodwork.

For a good two hours the riders, their families and visitors got to experience ham radio in action. When Peter Fournia (W2SKY, and president of RARA) demonstrated SSTV and PSK31, the visitors to the tent were understandably surprised that "hams" could do this sort of hi-tech stuff. At the end of the evening one of the last QSO's on sideband was with Puzant (OD4NH) in Beirut Lebanon.

This volunteer service effort was supported by many, too numerous to name here. Several Drumlins Club members were on hand to make the project run smoothly. Some were Bill Dutcher (W2OTE), Calvin, Bruzee (KC2HUP), Steve Almekinder (N2MKR) and Doug Peeso (KB2ROP). A father-and-son team showed how hamming helps teach public service. Dad Charlie Escrive (KB2SOZ) served as a spotter, and son Robbie (KC2DQN), age 14, did a fantastic job riding with Bike Repair.

When you volunteer as a ham, you'll never know what extras await you. In the afternoon after the ride, cyclists and communications volunteers could get a much deserved massage from the Onondaga School of Massage, who also donated their time. Then there was the very interesting after-dinner presentation about history of the region, followed by video footage of the day showing riders and volunteers at work.

The American Diabetes Association hopes to make the "Finger Lakes Foliage 130" into a major regional event that will ultimately draw hundreds of cyclists and raise even more funding for diabetes research. While this year's experienced riders enjoyed the "special treatment," they know that the news will spread in the bicycling community. In future Fall-130's the area Amateur Radio Clubs will need to field many more hams with VHF mobiles and handhelds for safety.

RARA Rag 20 Years Ago, November 1981

Ed Gable, K2MP

Then, as now, the program was the annual RARA auction, held at the Fire Academy, with "Smilin Ed Gable, K2MP" pounding the gavel. A timely article was written by Ron Jakubowski, K2RJ, called "*How to be Successful at Auction*" with tips on selling your used ham treasures. It was reported that Connie Mac, W3SW, SSB pioneer and Atlantic Division Director, was a silent key. Membership Chairman Irv Goodman, AF2K, reported that there were 917 current members. Writing for the RDXA, Rick Berg, WA2RLQ, told of DX operating techniques with emphasis on listening to the DX to pick up his operating style. Local Amateur Alan Komenski, AC2K, is on the Ballot running for Vice-Director of the Atlantic Division. New on-the-air was a 220 MHz repeater, sponsored by the Xerox ARA. WB2IMT/R on 224.68/223.08, with 175 watts ERP, was reported to have excellent coverage from its downtown Xerox Building site. Bruce Blair, WB2QKO, reported on the 15th Annual Palmyra Canal Town Days where some 23 area hams provided much needed coordination and message traffic handling via 2 meter FM. The RRRA column, written by Ron Jakubowski, K2RJ, reported that the 28/88 repeater was being desensed by external transmitters at Cobbs Hill. The solution was a remote receiver to be installed by December. The *Heathkit Electronics Center*, on Jefferson Road, now advertising "We're Not Just Heathkits Anymore" and offering Hustler, Cushcraft, Ameco and other fine products. From the Want Ads you could buy a Kenwood TS-700A from Sax Ringer, W2SAW.

FOR SALE: Tower, 40 foot E-Z Way crank up, good condition. \$75.00. Also 35 foot, very light aluminum fixed tower. Needs two spots welded. \$25.00. Both on ground in Greece ready to pick up. Ed Gable, K2MP, 392-3088 or k2mp@arrl.net

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RARA RAG 4

Ham Testing

Marykay Vesco, KC2DPG

Have you been waiting for an upgrade?? Need your first ticket?? RARA has started testing under a new sponsoring VEC, and would like to encourage you to attend our next testing session on November 17, 2001 at the Social Services Bldg, 111 Westfall Rd. Registration begins at 8:30 A.M. No pre-registration is required. Donations will be accepted. Inquires or questions may be directed to George Platteter, AA2FO at (716) 334-4488.

Please call in advance if there are any special requirements, so that we can make the necessary arrangements.

Historical Bits

Ed Gable, K2MP

- 1906 — Prof. Fessenden, using a 2.5 kW alternator at a frequency of 70 kc, transmits voice over a distance of 600 miles. Shipboard operators cannot believe their ears as Christmas music fills their headphones.
- 1935 — Russ Hall explains tropospheric refraction and why signals exceed line-of-site operation.
- 1950 — U.S. Amateur population near 90,000.

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Fish Stories And Boat Anchors

Bill Hopkins, AA2YV

It wasn't long into the summer when my fingers began to itch. Summer is the time I have a slight bit more *private* time on my hands, so I finally felt that rare sense of innocence a ham gets as I went to the basement and reached for the Optivisor jeweler's glasses hanging over the rotary saw blade on the workbench wall. Peering out from between the funny goggles and my regular reading glasses, I made my way to a basement corner and scoured the pile of old, defective ham gear to find just the right repair project to kick off the summer. There was the TS-520SE I had unsuccessfully tried to fix up on the quick, the Heathkit twins MR1 (Comanche) and MT1 (Cheyenne), and that little "Rock Bending Receiver" for 7 MHz (QST, Aug. 95). I could never get it to work well. Other stuff, the RCA Institutes signal generator, the Heathkit tube tester and the Hot Water 101 just stared at me, each trying to attract my attention. I needed a special sign, but none came.

It's clear that most of my repairing and building has been in the HV tube tradition. I made a decision: first, buy another storage rack and unclutter the basement, and then find a cute little solid-state project. This was going to be a bold move for me. I had never dared to build home brew 12-volt gear from scratch. So on the net I found a QRP website with info for the Herring Aid 5 receiver for 40 meters. This would take some time, and I vowed to see it to the end.

It's not cheating to use a pre-printed circuit board, so I paid the \$7.50 (plus handling) and also sent away for the two small transformers and a transistor or two. (The 2N2222A's were easy to find locally.) Now I needed the toroid donuts to wind the inductors. On the twisted pair I made a call or two and got some samples, *free!* A local favorite parts place provided the rest. So with about \$20 invested I set to work. It took no time to mount the parts, until I came to the toroid windings. Four donuts, and two of them had more than one winding; one of them had a tap at 5 turns from ground. I got really good at putting 45 turns on each donut, obviously using my Optivisor magnifying glasses.

So, plug it in I did, and got nothing. I put

the whole kit and kaboodle away for a week or so to brood. I should have got something, anything through my computer speaker amplification system. I had almost convinced myself I hadn't made the possible mistakes listed in an alignment guide for this receiver. I went back to the schematic and the pictorial directions from the Internet. Naively I had followed the incorrect drawing for the vfo inductor, which put it *out of phase*.

The inductor rewound, this time I got signals, plenty of them: Radio Moscow, the CBC, BBC, Deutsche Welle and a religious station from the Maine woods – all at once. I couldn't peak the front end, and I couldn't find the vfo signal around 7.000 MHz. I finally located it with my general coverage Hammarlund HQ 145A receiver down at 5.6 MHz. When I turned the little 5-20 pfd trimmer in the vfo tank, it didn't come up to 7.000. Naturally! That's too big a jump. So what was wrong? I couldn't figure it. Look, if the tank circuit of the vfo is way below 40 meters, then there's too much inductance and/or capacitance. Aha! I had too many turns on that vfo toroid inductor. But why? Here's why. The instructions (read "destructions") on the Internet assumed I would be using the #28 wire, but with thick synthetic insulation, not the #28 magnet wire I was using.

I played around with the simple formula $L = A_{sub}L$ (Turns squared / 10,000) and found that the " $A_{sub}L$ " value (microhenries per 100 turns) had to be adjusted from 49 (for a T50-2 toroid) to something else. This wasn't rocket science, so I fudged down to 38 turns from the prescribed 45, and bingo! I hit it. (Actually, I had to rewind all the toroids.)

The little Herring Aid 5 single conversion receiver now rejected or attenuated many broadcast stations and I could peak the front end nicely. The 5K pot used as a bandspread tuner didn't give the promised 100 KHz coverage, but I was happy with my adjustment for 7.015 to 7.045.

With some solder braid I cleaned up the pig's breakfast I had made on the solder side of the circuit board, and then I found an old Apple external floppy drive plastic enclosure to make it look "professional." Now I need a transmitter, I thought.

If the receiver was dubbed the Herring Aid – somebody had originally used a herring tin – I

(Continued on page 7)

AWA Museum Closes For The Season – Seeks Guides

Ed Gable, K2MP

The Bloomfield, New York, based AWA Electronic Communication Museum closed for the season on October 28th after a successful season. Usually referred to as just the Radio Museum, the AWAECM was first started in 1952 by four local hams and has progressed to day to be towards the top of such museums worldwide. This year saw two new exhibits; the *Made in Rochester* display as well as a very popular working exhibit of 1950's vintage radioteletype machines. The usual ham radio favorites, including the ever amazing and attention grabbing full kW rotary spark gap transmitter, were there for your pleasure as well.

This year the museum also completed its application for status as a fully Chartered New York State museum. This places our little museum in the same status as the Rochester Museum and Science Center, the George Eastman House and other fine establishments, an accomplishment we are very proud of. New artifacts still continue to come in on almost a weekly pace and include both Ham Radio and broadcast era related items, tubes, components and documentation.

The museum closes for the winter season and will open the first Sunday in May 2002. In the mean time the museum staff will be working to improve, update and change displays for your continuing viewing and learning pleasure. The museum is always looking for new volunteers, either for our Tuesday work sessions or as Museum guides for a few weekend hours. We have a great time! If interested, please apply with the museum Curator, Ed Gable, k2mp/w2an, 392-3088 or k2mp@arrl.net. Do visit the museum's web site at www.antiquewireless.org.

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Is This Your Last Issue Of The RAG?

Richard Goslee, K2VCZ

The membership period for RARA starts the first of September each year and continues through the end of August the following year. The final membership expiration each year is October 31, which includes a 2-month grace period for payment of your dues. Check the address label on your current issue of the *RAG* for your expiration date. If it shows OCT. 2001 your dues have not yet been received (as of October 10th) for the year 2001-2002, and this will be your last issue of the *RAG*. In addition you must be a current PAID UP member of RARA to participate in the auction at the November meeting so now is a good time to send your check.

You may pay your dues at any RARA meeting or send them along with your membership application to RARA, P.O. Box 93333, Rochester, NY 14692-8333.

RARA would also like to take this opportunity to thank the many members that have taken the opportunity to include a Tax Deductible Donation to RARA along with their dues payment.

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(Continued from page 5)

would have to build the Tuna Tin 250 milliwatt transmitter. I built it in August and September, this time rigging my own home brew pc board and lowballing it on cost. Three bucks, I guess.

I've also learned two valuable things. Use an antenna tuned to your desired frequency, even for tests, and ground the little critter. Things work so much better that way.

What's my next project, you may ask? I think I'll go to the RARA Auction on November 2nd and pick up another piece of gear in need of some love. If I support the Club, I won't have to feel pangs of guilt when I spend winter evenings tweaking a pre-enjoyed ham bobble or using the XYL's dishwasher to clean up a dirty boat anchor.

Rochester Hamfest
May 31 and
June 1 and 2,
2002

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All Elements Needed To Complete a License Class

Saturday

November 17, 2001

Registration - 8:30 A.M.

Testing - 9:00.A.M.

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111 Westfall Rd., Rochester

Inquires (716) 334-4488

aa2fo@rpa.net

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(See Instructions on Reverse)

PG Form 3526, October 1992 (Reverse)

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